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(71) Applicants:
- **Soremartec S.A.**
  6700 Arlon (BE)
  Designated Contracting States:
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- **Ferrero S.p.A.**
  12051 Alba (Cuneo) (IT)
  Designated Contracting States:
  IT
- **Ferrero Offene Handelsgesellschaft m.b.H.**
  35260 Stadtallendorf (DE)
  Designated Contracting States:
  DE

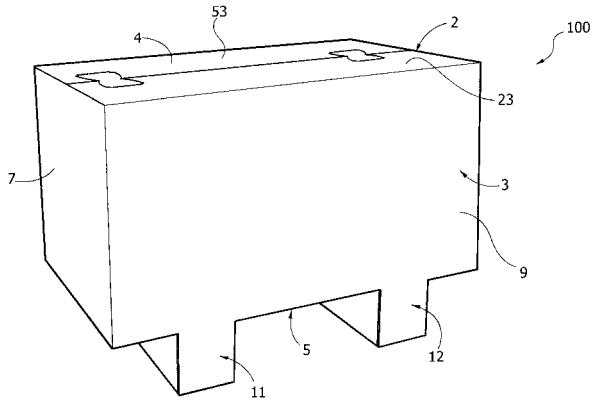
(72) Inventor: **Battaglino, Roberto**
I-12066 Monticello d'Alba (Cuneo) (IT)

(74) Representative: **Frontoni, Stefano**
Buzzi, Notaro & Antonielli d'Oulx
Via Maria Vittoria, 18
10123 Torino (IT)

(54) Base for displaying products

(57) A base for displaying products (100) comprising:
- a boxlike body (2) having a closed side wall (3), a top part (4) designed to define a resting surface for sales units, and a bottom part (5);
- a first socle-like formation (11) and a second socle-like formation (12), which are associated to the bottom part of said boxlike body and are designed to rest on the floor and to keep said base with its bottom part (5) detached therefrom; and
- a set of reinforcement panels (13) for supporting said top part, which are arranged within said boxlike body and are substantially orthogonal to said top part (4). In the aforesaid base a first reinforcement panel of said set is anchored to the side wall of said boxlike body and, in an area corresponding to said bottom part, is folded back so as to form said first socle-like formation, and in that a second reinforcement panel of said set is anchored to the side wall of said boxlike body and, in an area corresponding to said bottom part, is folded back so as to form said second socle-like formation.

FIG. 1



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Description

[0001] The present invention relates to a base for display stands of the type comprising:

- a boxlike body having a closed side wall, a top part designed to define a resting surface for one or more display stands (or sales units) for products, and a bottom part;
- a first socle-like formation and a second socle-like formation, which are associated to the bottom part of said boxlike body and are designed to rest on the floor and to keep said base with its bottom part detached therefrom; and
- a set of reinforcement panels for supporting said top part, which are arranged within said boxlike body and are substantially orthogonal to said top part.

[0002] A base of the aforesaid type for display stands is, for example, described in the French patent application No. FR2781304 as also in the German utility model No. DE 9415663. Specifically, in the bases described in said documents the aforesaid closed side wall is defined by a first pair and a second pair of parallel opposite sides, the aforesaid first and second socle-like formations run substantially parallel to the sides of one between said first and second pairs of opposite sides, and the aforesaid reinforcement panels are parallel to one or the other between said first and second pairs of opposite sides of said boxlike body.

[0003] The bases described in said documents are both **characterized in that** they envisage sets of reinforcement panels arranged according to extremely elaborate grid-like configurations. Specifically, said sets envisage a first row of reinforcement panels that are arranged parallel to a first pair of opposite sides of the side wall of the boxlike body, and a second row of reinforcement panels, which slot into the panels of the first row and are parallel to the second pair of opposite sides of the side wall of the boxlike body. The bottom portions of the boxlike body envisage appropriate slits that are engaged by the bottom flaps of one of the two rows of panels in order to anchor the set of reinforcement panels to the boxlike body.

[0004] It is evident from the above description that the bases according to the known art discussed above are characterized by decidedly complex structures, which are also complicated and laborious to install.

[0005] The object of the present invention is to improve said type of bases, rendering them structurally simpler but without reducing their stiffness and strength.

[0006] The object referred to above is achieved via a base for display stands having the characteristics of Claim 1.

[0007] The claims form an integral part of the technical teaching provided herein in relation to the invention.

[0008] The invention will now be described, purely by way of non-limiting example, with reference to the annexed representations, wherein:

- Figure 1 illustrates a perspective view of the base for display stands described herein according to a specific embodiment;
- Figure 2 illustrates two laminar elements of the base of Figure 1;
- Figure 3A illustrates a further laminar element of the base of Figure 1;
- Figure 3B illustrates a cross section of the element of Figure 3A in its folded condition;
- Figure 4 illustrates a top plan view of the base of Figure 1 with its top part open; and
- Figure 5 illustrates a top plan view of the bottom part of the base of Figure 1.

[0009] In the ensuing description, various specific details are illustrated aimed at providing an in-depth understanding of the embodiments. The embodiments can be provided without one or more of the specific details, or with other methods, components, or materials, etc. In other cases, known structures, materials, or operations are not illustrated or described in detail so that the various aspects of the embodiment will not be obscured.

[0010] The references used herein are merely provided for convenience and hence do not define the sphere of protection or the scope of the embodiments.

[0011] In the figures, designated by the reference 100 is a base that can be used, in general, as base for displaying products, and in particular as base for display stands for foodstuffs such as, for example, confectionery products.

[0012] The base 100 described herein can be used in conjunction with display stands of any type, morphology, and appearance.

[0013] In general, said base is made as a cardboard-design product and comprises a boxlike body 2 having a side wall 3, a top part 4, and a bottom part 5. It should be noted that the shape of the boxlike body is not in itself an element important with respect to the main innovative characteristics that will be described hereinafter.

[0014] In any case, the side wall 3 is preferably closed according to the shape in top plan view of a parallelogram, specifically a rectangle, and defines a first pair of parallel opposite sides 7, 8 and a second pair of parallel opposite sides 9, 10. The top part 4, the specific configuration of which will be described in detail hereinafter, closes the side wall 3 at the top, defining a resting surface set on which is the display stand to be associated to the base 100.

[0015] The base 100 further comprises in association to the bottom part 5, a first socle-like formation 11 and a second socle-like formation 12, which are designed to rest on the floor and are to keep the base 100 with its bottom part 5 detached from the floor, so as to enable transport of the display stand with a fork-lift truck.

[0016] In the example illustrated, the two socle-like formations 11, 12 extend parallel to the sides 7 and 8.

[0017] Finally, the base 100 comprises a set of reinforcement panels 13 that are arranged within the boxlike body 2. As occurs in bases according to the known art, said panels have in the first place the function of supporting the top part 4 preventing this from collapsing under the weight of the display stand or of the products arranged thereon.

[0018] According to an innovative characteristic of the base described herein, each panel 13 moreover has, in an area corresponding to the bottom portion 5 of the boxlike body, a portion appropriately folded that forms one or the other of the two socle-like formations 11 and 12.

[0019] In various embodiments, as in the one illustrated, each panel 13 has a side 13^{A} that extends parallel to the sides 7 and 8, substantially starting from the top part 4 as far as the bottom part 5, where it is then folded back on itself so as to form the respective socle-like formation.

[0020] Specifically, with reference to Figures 3A and 3B, the folded portion of the side 13^{A} defines in sequence, in the direction of folding, a first part 13^{I}, substantially parallel to the bottom part 5 and defining the resting surface of the socle-like formation, a second part 13^{II}, substantially parallel to the main portion of the side 13^{A}, a third part 13^{III}, substantially parallel to the resting part 13^{I}, and finally a fourth part 13^{IV}, which is made to mate with and adhere to the main portion of the side 13^{A}.

[0021] In various embodiments, as in the one illustrated in the figures, each panel 13 is anchored to two opposite sides of the side wall of the body 2. Specifically, each panel 13 is anchored to the opposite sides 9 and 10, via the strips 13^{V} and 13^{VI} set in diametrally opposite positions with respect to the side 13^{A}, which are each made to mate with and adhere to a respective corresponding side between the opposite sides 8 and 9.

[0022] In various embodiments, as in the one illustrated in the figures, each panel 13 has a further side 13^{B}, which is also designed to constitute a reinforcement for the top part of the base 100. The side 13^{B} sets itself so as to form together with the side 13^{A} an angle comprised between 0° and 90°, extremes excluded.

[0023] Specifically, said side is located alongside the strip 13^{VI} and extends, within the boxlike body 2, in a direction orthogonal to the top part 4, from this as far as in the proximity of the side 13^{III} of the socle-like formation of the respective panel.

[0024] As may be seen in Figure 4, the two panels 13 are mutually arranged within the boxlike body 2 according to an orientation in top plan view, turned over through 180° with respect to one another, so that their respective sides 13^{B} are designed to extend from the opposite sides 9 and 10 until they reach one and the same central area of the boxlike body.

[0025] It will be appreciated that the fact of envisaging a reinforcement panel designed to define itself a socle-like formation of the base and to be anchored to the side wall of the boxlike body constitutes an altogether innovative configuration that enables considerable simplification of the structure of the base but at the same time stiffening and stabilization thereof, at least as much as the base configurations proposed by the known art. It should be noted, in this connection, that said particular configuration means that each panel 13 to all purposes and effects constitutes the load-bearing column of the boxlike body, on which all the loads acting on the top part are discharged, without said panel having to occupy all the area underlying said part. Consequently, the complex grid-like structures of the known art, described previously, are in no way necessary, whereas it is sufficient to use a panel 13 that is sufficiently sturdy as to support, together with the other homologous panel, the loads that the base is to carry. Advantageously, said panel can have a structure made of corrugated and reinforced cardboard, for example of the type commonly known in the sector as "EB microtriple", whilst the boxlike body 2 may be constituted by a lighter and less complex cardboard structure, for example of one of the types commonly known in the sector as "B-wave", "NB-wave", and "NE-wave".

[0026] It will moreover be appreciated that in the embodiments where the panel 13 comprises also the side 13^{B}, in addition to the greater support that is offered to the top part 4, also a high torsional strength is bestowed on the overall structure of the base. Without going into the details of an in-depth structural analysis, it is has emerged that said further effect is due to the fact that the side 13^{B} is inclined in such a way as to be neither orthogonal nor parallel to the reinforcement side 13^{A}. Moreover, also the weight carried by the side 13^{B} is, but for deformations of the side 13^{B} itself or of the side 13^{A}, supported by the socle-like formation itself of the respective panel 13 without the bottom part 5 being in any way loaded.

[0027] In various embodiments, as in the one illustrated in the figures, the two panels 13 are arranged within the boxlike body in such a way that the two socle-like formations 11 and 12 are recessed by one and the same distance from their respective sides 7 and 8 closest to them. Said arrangement enables a great stability of the base to be obtained also for the cases where non-uniformly distributed loads or loads set in off-centre positions are located thereon.

[0028] Described in detail hereinafter is the specific configuration of the boxlike body 2 that is illustrated in the figures. It is clear, however, that said specific configuration constitutes merely an example of embodiment and that the base described herein can have boxlike bodies also of other types.

[0029] As may be seen in Figure 2, the boxlike body 2 has a substantially rectangular cross section in top plan view, in which the two opposite sides 9, 10 are longitudinal sides, whilst the sides 7, 8 are transverse sides. Likewise, the top and bottom parts 4 and 5 both have a generic rectangular shape. The body 2 comprises a first panel 20 and a second panel 50 each having a set of mutually foldable sections that all together define the aforesaid top and bottom parts 4, 5 and the side wall 3.

[0030] With reference to the side wall 3, the panel 20 defines the transverse side 7 and the longitudinal side 9, whilst the second panel 50 defines the transverse side 8 and the longitudinal side 10. Preferably, alongside the side 9, the panel 20 has a strip 21 that is to mate with and adhere to an internal edge of the side 8, and likewise, alongside the side 10, the panel 50 has a strip 51 that is to mate with and adhere to an internal edge of the side 7. The composition of the side wall 3 envisages connection, via the strip 21, of the side 9 to the side 8, and moreover connection, via the strip 51, of the side 10 to the side 7. For said purpose, the strips 21 and 51 are previously rendered adhesive, for example, via deposition of glue or else via coating thereof with purposely chosen adhesive materials.

[0031] With reference to the top part 4, the panel 20 identifies, above the sides 7 and 9, respectively, the sides 22 and 23, and, accordingly, the panel 50 has, above the sides 8 and 10, respectively, the sides 52 and 53. The sides 23 and 53 have respective complementary shapes that together identify the resting surface of the top part 4, whilst the sides 22 and 52 are to be folded towards the inside of the sides 22 and 53, and, preferably, have, in order to fix the latter in their closing configuration, slits 65 within which there can be slotted respective tabs 64 provided in the sides 23 and 53 themselves.

[0032] With reference to the bottom part 5, it is to be noted that in the base described herein it does not have any main supporting function but is simply designed to close the various compartments defined between the side wall 3 and the reinforcement panels 13 at the bottom. This is due to the particular configuration of the base described herein, which, as has already been said previously, enables concentration, on the reinforcement panels, of the stresses generated by the loads set on the top part of the boxlike body.

[0033] With reference to the embodiment of the figures, the panels 20 and 50 have at the bottom respective tabs that come to define the bottom of each of the aforesaid compartments and to form, as a whole, the bottom part 5 of the boxlike body. Specifically, the panel 20 has on the inside of the side 7 a tab 24, and on the inside of the side 9, starting from the outside, a pair of opposed external tabs 25 and 26, and a central section 27. Accordingly, the panel 50 has on the inside of the side 8 a tab 54 and on the inside of the side 10, starting from the outside, a pair of opposed external tabs 55, 56 and a central section 57.

[0034] With reference to Figures 2 and 5, the composition of the bottom part envisages that the tabs 25 and 56 be set on top of the tab 24 so as to close the first compartment defined between the side 7 and the reinforcement panel 13 closest thereto at the bottom, and likewise that the tabs 26 and 55 be set on top of the tab 54 so as to close the compartment defined between the side 8 and the reinforcement panel 13 closest thereto at the bottom. Preferably, in order to fix said tabs to one another in their mutual closing configuration, provided on the tabs 25, 26, 55 and 56 are flaps 66 designed to slot into openings 67 of the tabs 24 and 54. The central sections 27 and 57 are, instead, designed to close the compartment defined between the two reinforcement panels 13 at the bottom. Preferably, said sections have a width slightly greater than the distance between the two socle-like formations 11 and 12 so as to be able to rest on these.

[0035] Finally, with reference once again to Figures 2 and 5, provided on the inside of the side 9, between the opposed tabs and the central section, are a further pair of opposed tabs 28 and 29, and likewise provided on the inside of the side 10, between the opposed tabs and the central section, are a further pair of opposed tabs 58 and 59. The tabs 28, 29 58 and 59 of the panels 20 and 50 are designed to close corresponding opposite ends of the socle-like formations and to constrain said formations directly to the side wall of the boxlike body in order to stiffen the overall structure of the base further. Preferably, said tabs are designed to slot into corresponding slits 68 that are located on the base sides 13^{I} of the socle-like formations 11 and 12.

[0036] Of course, without prejudice to the principle of the invention, the details of construction and the embodiments may vary, even significantly, with respect to what is illustrated herein purely by way of non-limiting example, without thereby departing from the scope of the invention, as defined by the annexed claims. For example, where in the course of the present description reference has been made to slotting tabs and corresponding openings, the use of adhesive material may possibly be envisaged, as an alternative.

Claims

1. A base for display stands (100) comprising:

- a boxlike body (2) having a closed side wall (3), a top part (4) designed to define a resting surface for one or more display stands, and a bottom part (5);
- a first socle-like formation (11) and a second socle-like formation (12), which are associated to the bottom part of said boxlike body and are designed to rest on the floor and to keep said base with its bottom part (5) detached therefrom; and
- a set of reinforcement panels (13) for supporting said top part, which are arranged within said boxlike body and are substantially orthogonal to said top part (4);

said base being **characterized in that** a first reinforcement panel (13) of said set is anchored to the side wall (3) of said boxlike body and, in an area corresponding to said bottom part (5), is folded back so as to form said first socle-like formation (11), and **in that** a second reinforcement panel (13) of said set is anchored to the

side wall of said boxlike body and, in an area corresponding to said bottom part (5), is folded back so as to form said second socle-like formation (12).

2. The base according to Claim 1, wherein:

- said closed side wall (3) is defined by a first pair and a second pair of parallel opposite sides (7, 8, 9, 10);
- said first and second socle-like formations (11, 12) run substantially parallel to the sides of one between said first and second pairs of opposite sides; and
- said reinforcement panels (13) are, at least in an area corresponding to one of their sides, parallel to one or the other between said first and second pairs of opposite sides of said boxlike body.

3. The base according to Claim 2, wherein:

said first and second panels each comprise a first reinforcement side (13^{A}), substantially parallel to the sides of one between said first and second pairs and anchored, via respective tabs in opposed positions with respect to said first side, to the opposite sides of the other between said first and second pairs, which, in said bottom portion, is folded back so as to form the respective socle-like formation.

4. The base according to Claim 3, wherein said first and second panels have a second reinforcement side (13^{B}), which is contained within said boxlike body and extends in a direction such that it forms together with the first side an angle comprised between 0° and 90°, extremes excluded.

5. The base according to any one of the preceding claims, wherein said first and second socle-like formations are recessed by one and the same distance from the respective side closest to them of said one between said first and second pairs.

6. The base according to any one of the preceding claims, wherein said boxlike body is formed by a third distinct panel (20) and a fourth distinct panel (50), which have mutually foldable sections that all together define said side wall and said top and bottom parts.

7. The base according to any one of the preceding claims, wherein said bottom part is defined only by distinct sections (24, 25, 26, 27, 54, 55, 56, 57) designed to close the compartments defined between said side wall and said first and second reinforcement panels.

8. The base according to any one of the preceding claims, wherein said side wall has respective flaps (28, 29 58 and 59) designed to close the opposite ends of the socle-like formations and to slot into slits purposely provided on the resting sides (13^{I}) of said formations.

9. The base according to any one of the preceding claims, made as a cardboard-design product.

FIG. 1

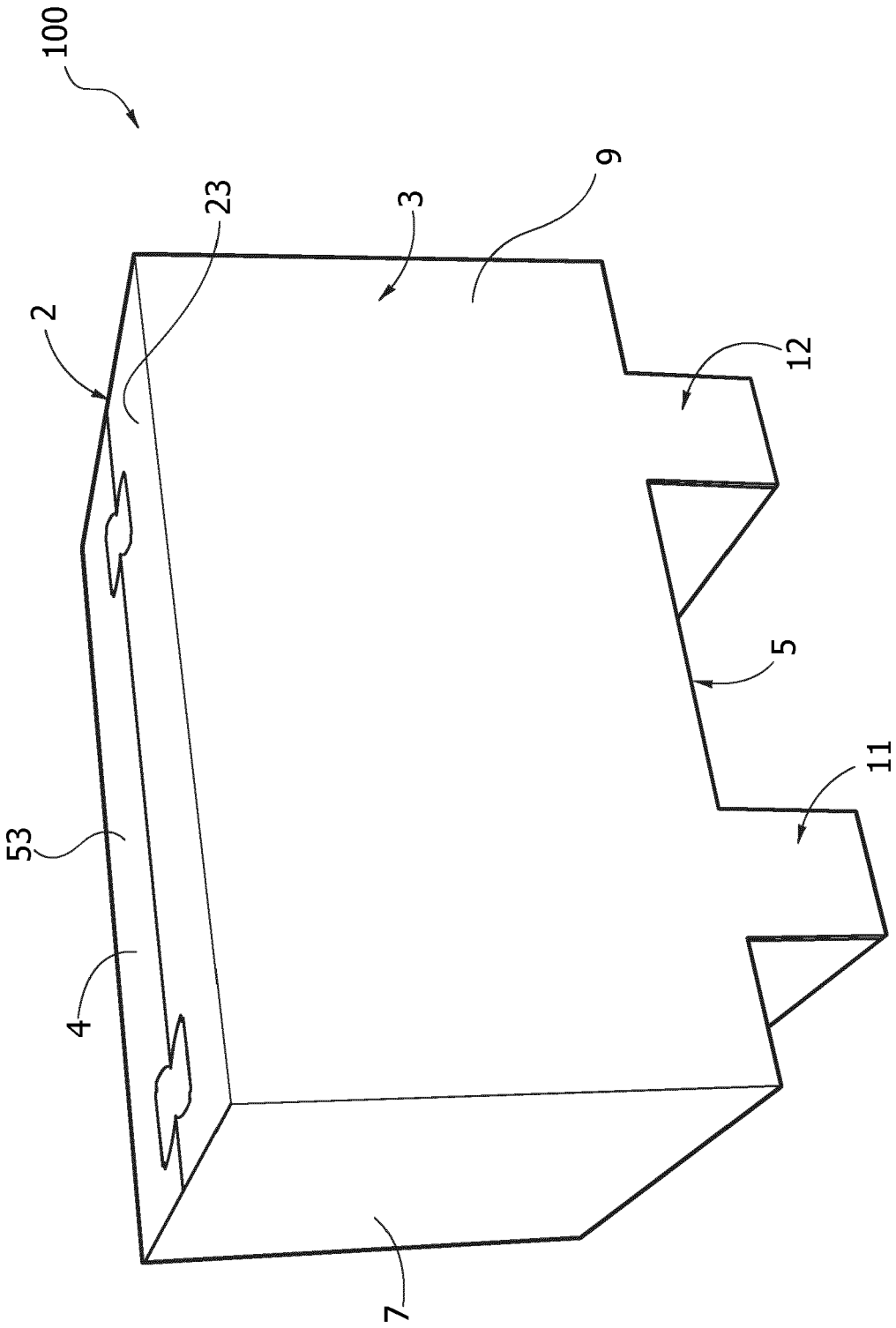

FIG. 2

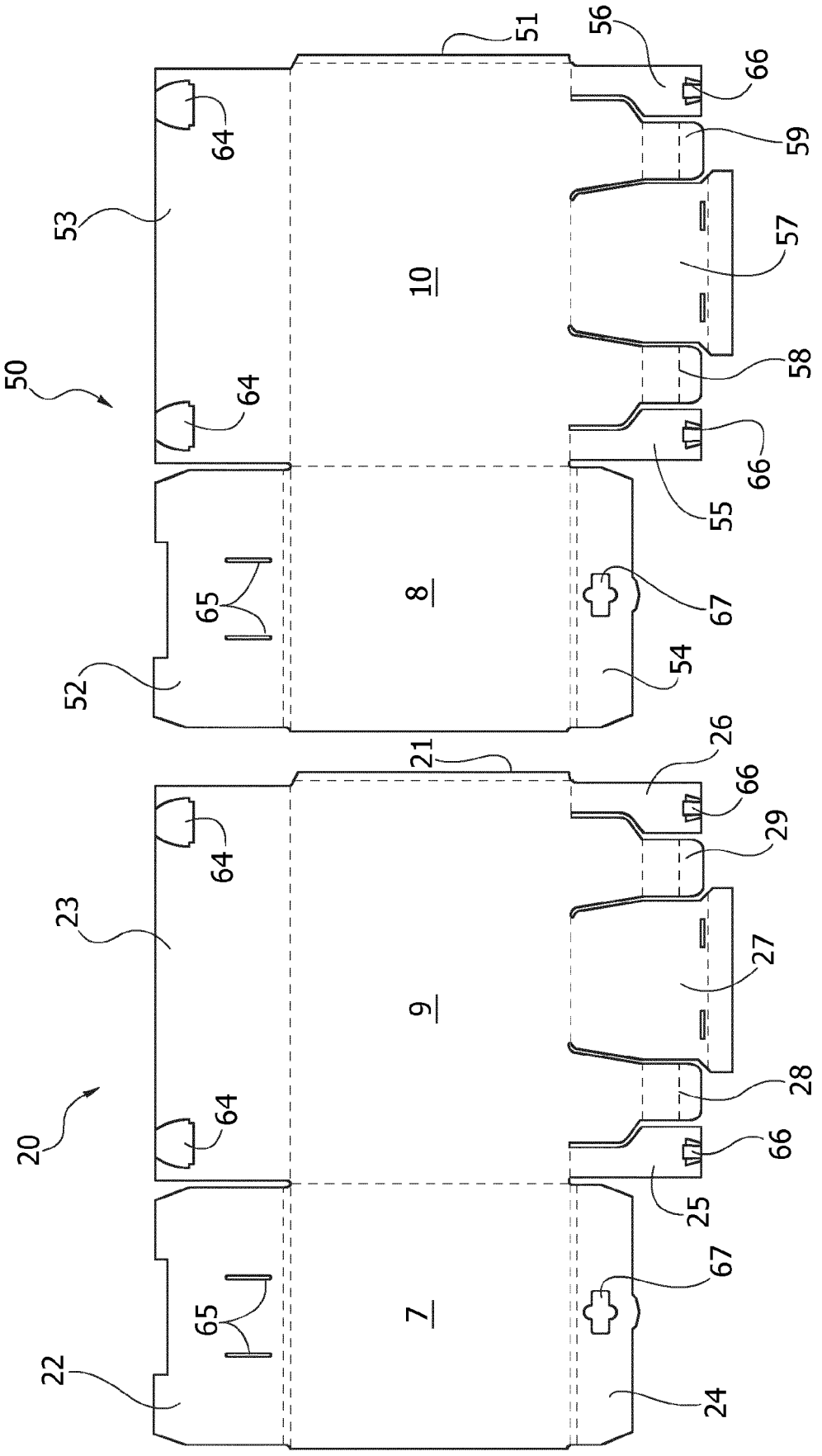
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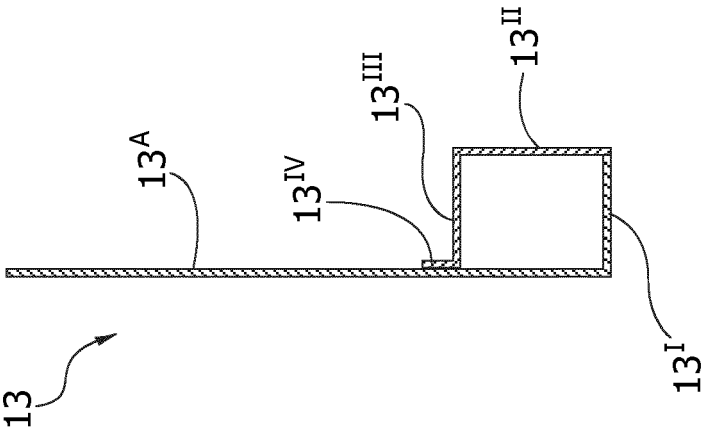
FIG. 3B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13^A
13^IV
13^III
13^II
13^I

FIG. 3A

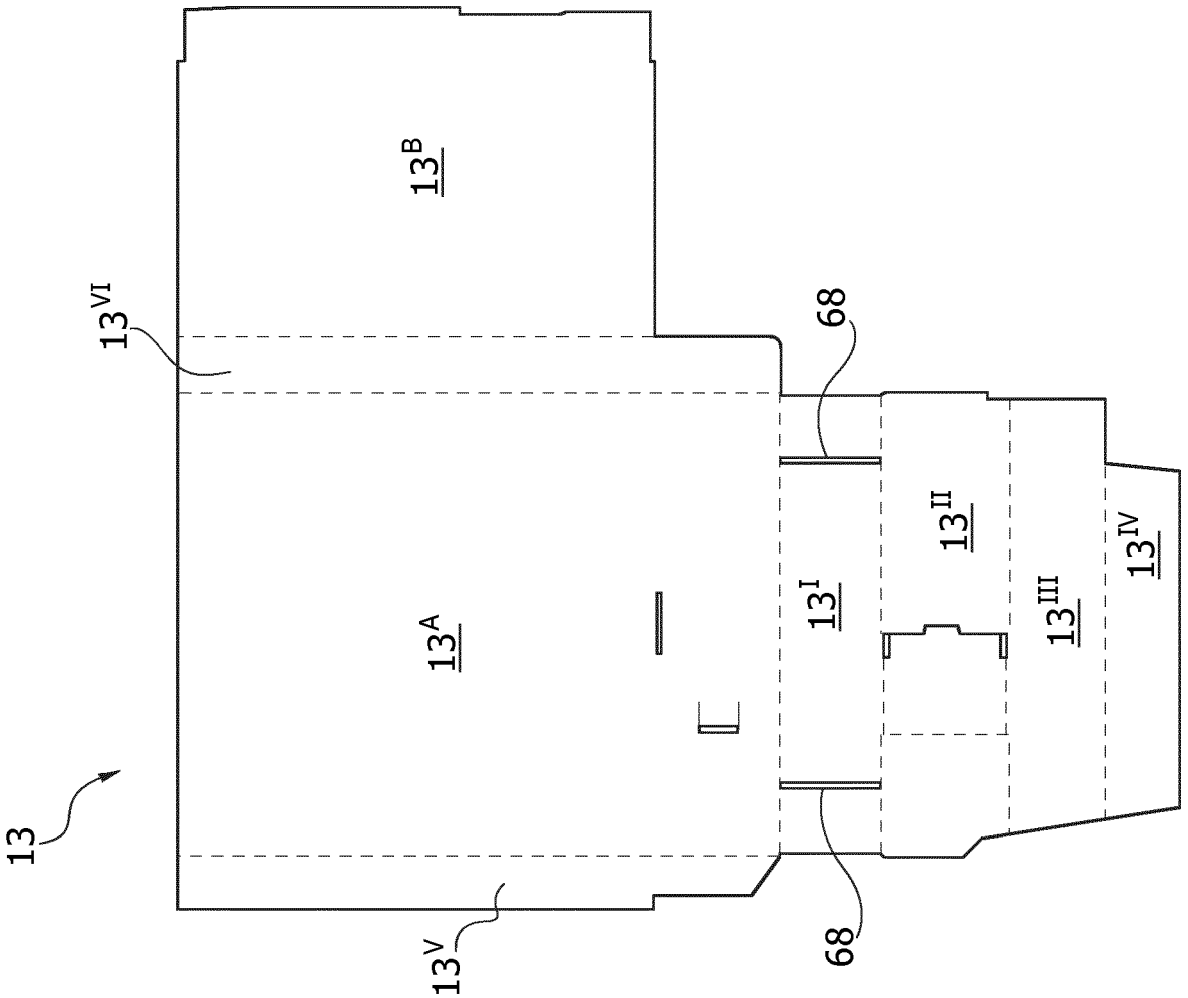
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FIG. 4

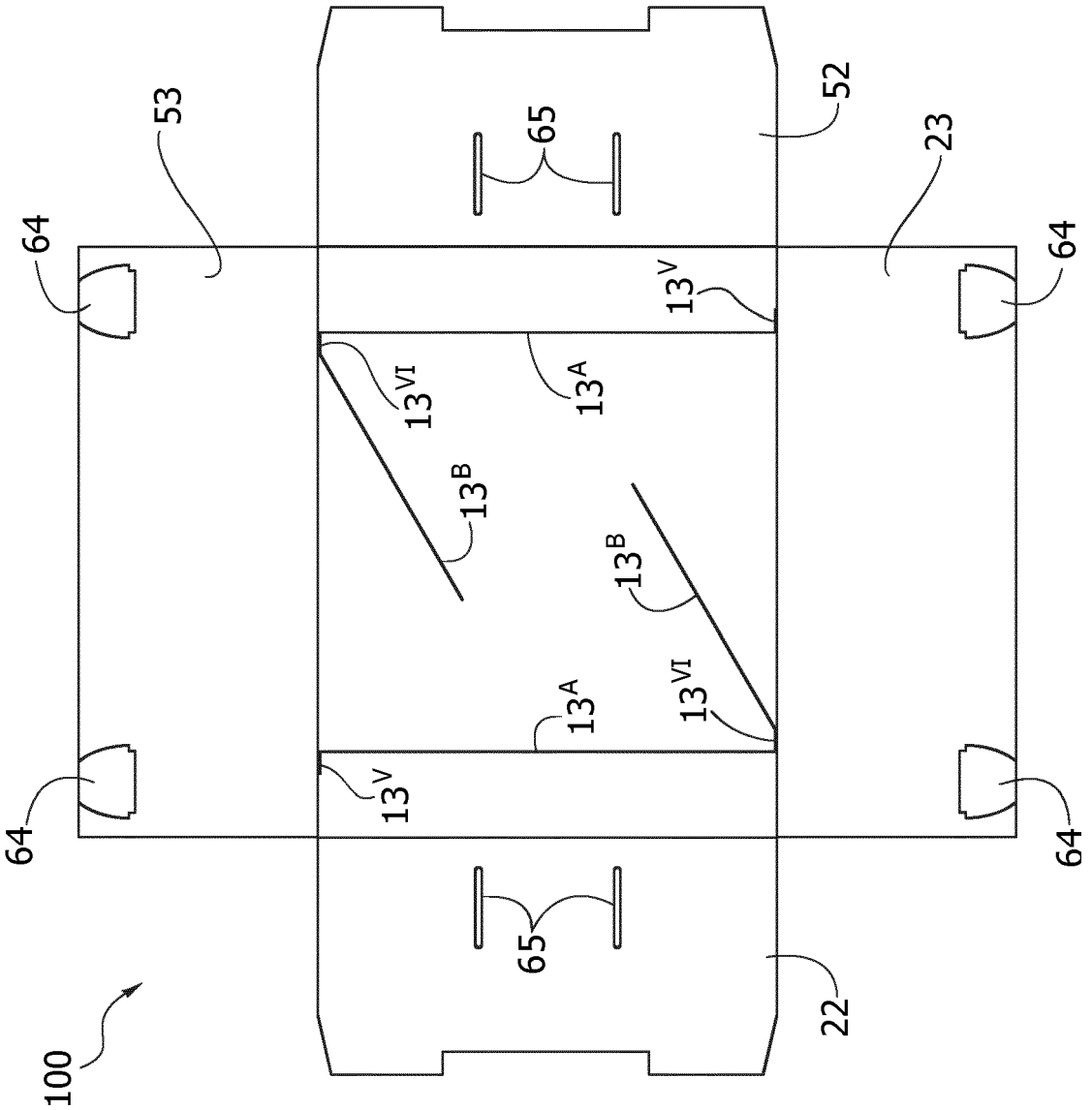
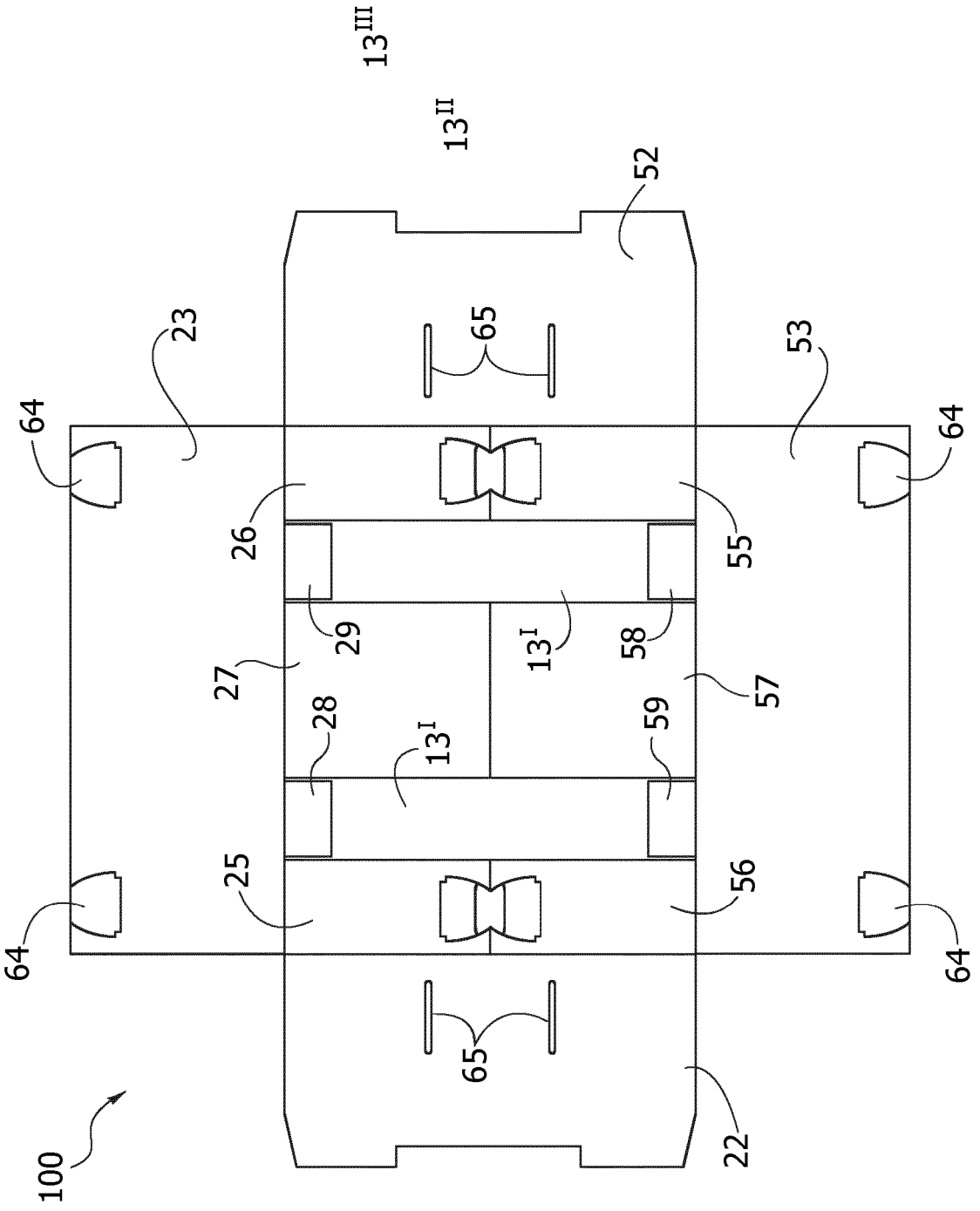


FIG. 5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EUROPEAN SEARCH REPORT

Application Number
EP 12 15 7686

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	23 May 2012	Cardan, Cosmin

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23-05-2012

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REFERENCES CITED IN THE DESCRIPTION

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- DE 9415663 **[0002]**